UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,880	07/10/2001	Kemal Guler	10014418	9181

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HEWLETT-PACKARD COMPANY	DASS, HARISH T

ART UNIT	PAPER NUMBER
3628	

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DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
Office Action Summary		09/902,880	GULER ET AL.
		Examiner	Art Unit
		Harish T Dass	3628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 July 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See In re Musgrave, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural

phenomena", and "abstract ideas". See Diamond v. Diehr, 450, U.S. 175, 185, 209

USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention

incorporates abstract ideas, such as mathematical algorithms, the invention may

nevertheless be statutory subject matter if the invention as a whole produces a "useful,

concrete and tangible result." See State Street Bank & Trust Co. v. Signature Financial

Group, Inc. 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent

Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences

(BPAI). See In re Toma, 197 USPQ (BNA) 852 (CCPA 1978). In Toma, the court held

that the recited mathematical algorithm did not render the claim as a whole non-

statutory using the Freeman-Walter-Abele test as applied to Gottschalk v. Benson, 409

U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the

issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed

subject matter...is statutory, not on whether the product of the claimed subject

matter...is statutory, not on whether the prior art which the claimed subject matter

purports to replace...is statutory, and not on whether the claimed subject matter is

presently perceived to be an improvement over the prior art, e.g., whether it "enhances"

the operation of a machine. In re Toma at 857.

In Toma, the claimed invention was a computer program for translating a source

human language (e.g., Russian) into a target human language (e.g., English). The

court found that the claimed computer implemented process was within the

"technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in State Street Bank & Trust Co. v. Signature Financial Group, Inc. never addressed this prong of the test. In State Street Bank & Trust Co., the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See State Street Bank & Trust Co. at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under °101, but rather under §§102, 103 and 112." See State Street Bank & Trust Co. at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, State Street abolished the Freeman-Walter-Abele test used in Toma. However, State Street never addressed the second part of the analysis, i.e., the "technological arts" test established in Toma because the invention in State Street (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the Toma test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a

§101 rejection finding the claimed invention to be non-statutory. See Ex parte Bowman,

61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, Claims 1-8 have no connection to the technological

arts. None of the steps indicate any connection to a computer or technology.

Therefore, the claims are directed towards non-statutory subject matter. To overcome

this rejection the Examiner recommends that Applicant amend the claims to better

clarify which of the steps are being performed within the technological arts.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ausubel

(US 6,021,398) in view of Rackson et al (hereinafter Rackson – US 6,415,270).

Re. Claims 1, 9 and 17, Ausubel discloses computer implemented system and method,

selecting characteristics of said market [Ausubel see entire document particularly,

Abstract; Figures 1-5; C1 L15-L36; C1 L60 to C2 L31], estimating a structure of said

market and predicting a first outcome of said market [C4 L3 to C5 L2; C7 L12-L18; C7

L37-L50], and evaluating said first outcome of said market [C2 L10-L17, C2 L56-L61];

and a bus, a memory interconnected with said Bus, and a processor interconnected

with said bus [C6 L15-L30 – auctioneer's computers systems includes bus] and

readable medium [C6 L15-L30 – auctioneer's computers systems includes hard drive to

store operating system, executables, database engine and data]. Ausubel does not

explicitly disclose selecting a relevant bidding model and predicting a bidding behavior.

However, Rackson discloses selecting a relevant bidding model and predicting a

bidding behavior [see entire document particularly, Abstract; Figures 12-14; C2 L45 to

C3 L32; C24 L5-L55] to select optimal bid to expect bidding range and determine

adjusted bid. It would have been obvious at the time the invention was made to a

person having ordinary skill in the art to modify the disclosure of Ausubel and include

selecting a relevant bidding model and predicting a bidding behavior, as disclosed by

Rackson, to optimize the bidding process.

Re. Claim 2, Ausubel discloses receiving a first user input, wherein said first user input

comprises information identifying an item to be auctioned [C6 L50-L63; C36 L10-L13],

accessing a database [C2 L53-L55; C6 L30-L37], retrieving from said database

historical bids data [C3 L25-L32; C6 L38-L48], retrieving from said database auction

characteristics data, wherein said auction characteristics comprise information relating

to historical auctions of similar items [C4 L3-L10; C7 L37-L50], outputting said bids data

[C35 L55-L67; C37 L40 to C40 L60], and outputting said auction characteristics data

[C35 L55-L67].

Re. Claim 3, Ausubel discloses receiving said auction characteristics data [C1 L61 to C2 L4; C2 L39-L52; C6 L50-L63; C36 L10-L13], and accessing a database [C2 L53-L55; C6 L30-L37]. Ausubel does not explicitly disclose retrieving from said database a relevant bidding model, wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data and outputting said relevant bidding model. However, Rackson discloses these steps [Figures 12-14; C2 L45 to C3 L32; C24 L5-L55] to select optimal bid to expect bidding range and determine adjusted bid. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Ausubel and include retrieving from said database a relevant bidding model, wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data and outputting said relevant bidding model, as disclosed by Rackson, to optimize the bidding process.

Re. Claim 4, Ausubel discloses receiving said bids data [C1 L61 to C2 L4; C2 L39-L52; C6 L50-L63; C36 L10-L13], expressing unobservable variables in terms of observable bids, wherein said unobservable variables are expressed in terms of observable bids by inverting said bid model, transforming said bids data to a sample of inverted bids, wherein said bids data are transformed by inverting said bid model, estimating an estimated latent structure of said market, wherein said sample of inverted bids receives application of statistical density estimation techniques to obtain said estimated structure [C14 L15 to C16 L66]. Ausubel does not explicitly disclose receiving said relevant

bidding model and outputting said estimated structure. However, Rackson discloses

these steps [Figures 12-14; C2 L45 to C3 L32; C24 L5-L55] to allow bidder to point out

the best strategy to be applied. It would have been obvious at the time the invention

was made to a person having ordinary skill in the art to modify the disclosure of Ausubel

and include receiving said relevant bidding model and outputting said estimated

structure, as disclosed by Rackson, to optimize the bidding process.

Re. Claim 5, Ausubel discloses receiving said estimated structure [C14 L15 to C16

L66]. Ausubel does not explicitly disclose receiving said relevant bidding model,

substituting said estimated structure for said unknown structure, and outputting a

prediction of bidding behavior. However, Rackson discloses selecting a relevant bidding

model and predicting a bidding behavior [see entire document particularly, Abstract;

Figures 12-14; C2 L45 to C3 L32; C24 L5-L55] to select optimal bid to expect bidding

range and determine adjusted bid. It would have been obvious at the time the invention

was made to a person having ordinary skill in the art to modify the disclosure of Ausubel

and include selecting a relevant bidding model and predicting a bidding behavior, as

disclosed by Rackson, to optimize the bidding process.

Re. Claim 6, Ausubel discloses receiving a second user input, wherein said second user

input comprises: an evaluation criterion and outputting said value [C1 L60 to C2 L20;

C35 L55-L67; C37 L40 to C40 L60]; Ausubel does not explicitly disclose a candidate

preference policy, a constraint, receiving said estimated structure, receiving said bidding

behavior prediction for said candidate preference policy, wherein said bidding behavior

prediction further comprises a prediction under said constraint, and obtaining a value of

said evaluation criterion, wherein said value is based on said estimated structure, said

bidding behavior prediction, said candidate preference policy, and said constraint, said

value comprising said first predicted outcome. However, Rackson discloses these steps

[Figures 12-14; C2 L45 to C3 L32; C12 L50-L63; C23 L55 to C24 L55] to select optimal

bid to expect bidding range and determine adjusted bid. It would have been obvious at

the time the invention was made to a person having ordinary skill in the art to modify the

disclosure of Ausubel and include candidate preference policy, a constraint, receiving

said estimated structure, receiving said bidding behavior prediction for said candidate

preference policy, wherein said bidding behavior prediction further comprises a

prediction under said constraint, and obtaining a value of said evaluation criterion,

wherein said value is based on said estimated structure, said bidding behavior

prediction, said candidate preference policy, and said constraint, said value comprising

said first predicted outcome, as disclosed by Rackson, to optimize the bidding process.

Re. Claims 7-8, Ausubel discloses receiving a third user input [Figure 1]. Ausubel does

not explicitly disclose wherein said third user input comprises a plurality of candidate

preference policies; receiving a predicted outcome for each said candidate preference

policy; calculating descriptive statistics for each said candidate preference policy,

wherein said descriptive statistics comprise a mean and a variance; ranking each said

candidate preference policy with respect to said calculated mean and generating

corresponding rankings for said plurality and outputting said descriptive statistics and said rankings. selecting a best preference policy, wherein said best preference policy comprises the candidate preference policy within said plurality having the highest said ranking; and outputting said best preference policy. However, Rackson discloses these steps [C21 L50-L63; Figures 12-14; C2 L45 to C3 L32; C21 L25 to C22 L48 ; C24 L5-L55] to coordinate a bidding strategy for an item or items across remote auction services in order to achieve an optimal result. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Ausubel and include above functions, as disclosed by Rackson, to coordinate a bidding strategy for optimal bid which is highest for the seller and lowest for the bidder.

Re. Claim 10, claim 10 is rejected with same rational as claim 2.

Re. Claim 11, claim 11 is rejected with same rational as claim 3.

Re. Claim 12, claim 12 is rejected with same rational as claim 4.

Re. Claim 13, claim 13 is rejected with same rational as claim 5.

Re. Claim 14, claim 14 is rejected with same rational as claim 6.

Re. Claims 15-16, claims 15-16 are rejected with same rational as claims 7-8.

Re. Claim 18, claim 18 is rejected with same rational as claim 2.

Re. Claim 19, claim 19 is rejected with same rational as claim 3.

Re. Claim 20, claim 20 is rejected with same rational as claim 4.

Re. Claim 21, claim 21 is rejected with same rational as claim 5.

Re. Claim 22, claim 22 is rejected with same rational as claim 6.

Re. Claims 23-24, claim 23-24 are rejected with same rational as claim 7-8.

Conclusion

Claims 1-24 are rejected.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 CFR ' 1.111 (c) to consider the references fully when responding to this action.

US 6,161,099 to Harrington et al, Dec. 12, 2000 "Process and apparatus for conducting auctions over electronic networks" discloses An apparatus and process for conducting auctions, specifically municipal bond auctions, over electronic networks, particularly the Internet, is disclosed. The auctioneer maintains a web site from which information about bonds to be auctioned can be obtained. A user participates in the auction by accessing the web site via a conventional Internet browser and is led through a sequence of screens that perform the functions of verifying the user's identity, assisting the user in preparing a bid, verifying that the bid conforms to the rules of the auction, displaying to the user during the course of the auction selected bid information regarding bids received and informing the bidder how much time remains in the auction.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harish T Dass whose telephone number is 571-272-6793. The examiner can normally be reached on 8:00 AM to 4:50 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harish T Dass
Examiner
Art Unit 3628

4/28/05